Armed Forces College of Medicine

AFCM

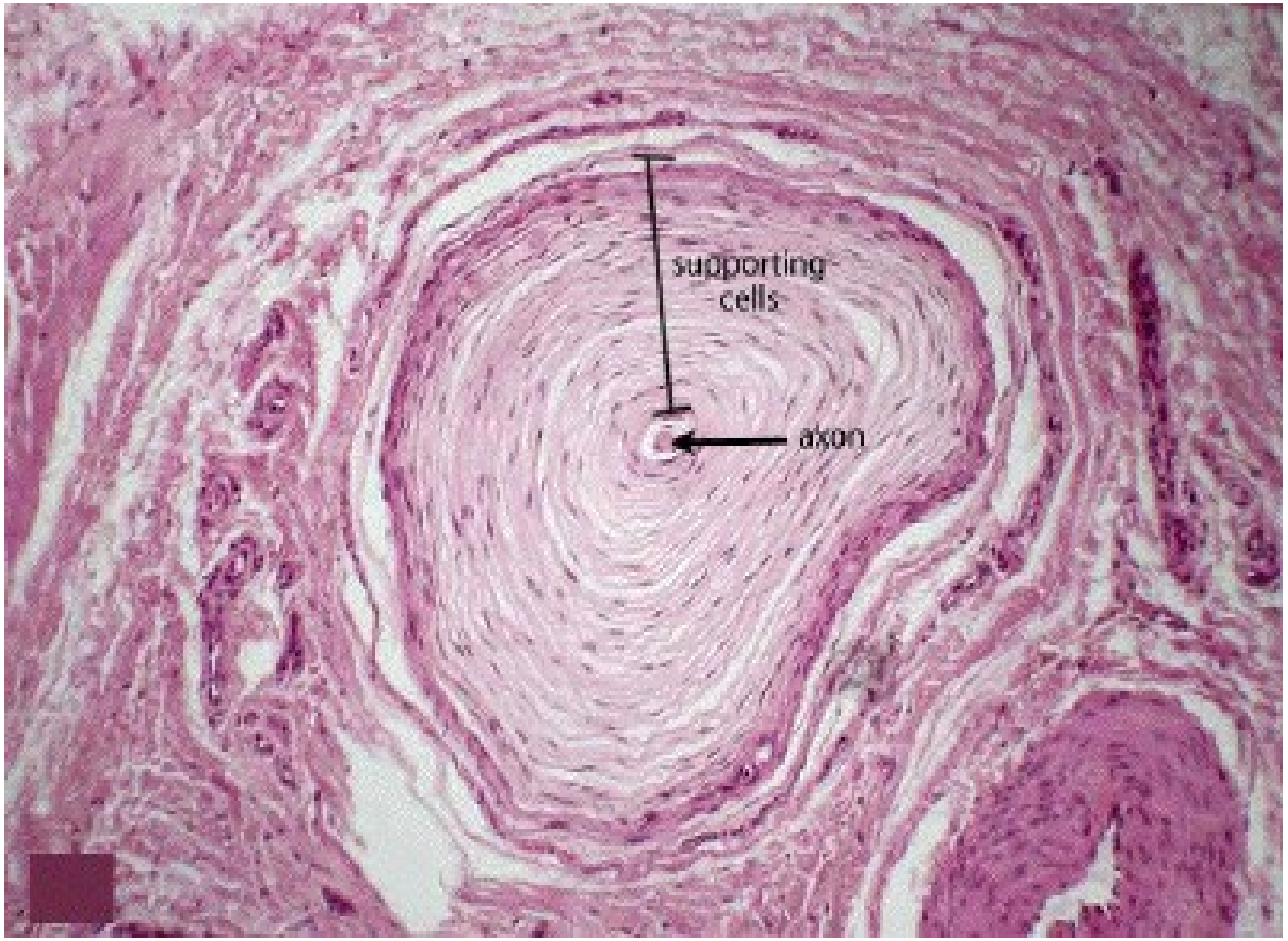
Receptors
Spinal cord
Brain Stem
Prof Dr Manal Hassan Moussa

INTENDED LEARNING OBJECTIVES (ILO)

Identify the sections and levels

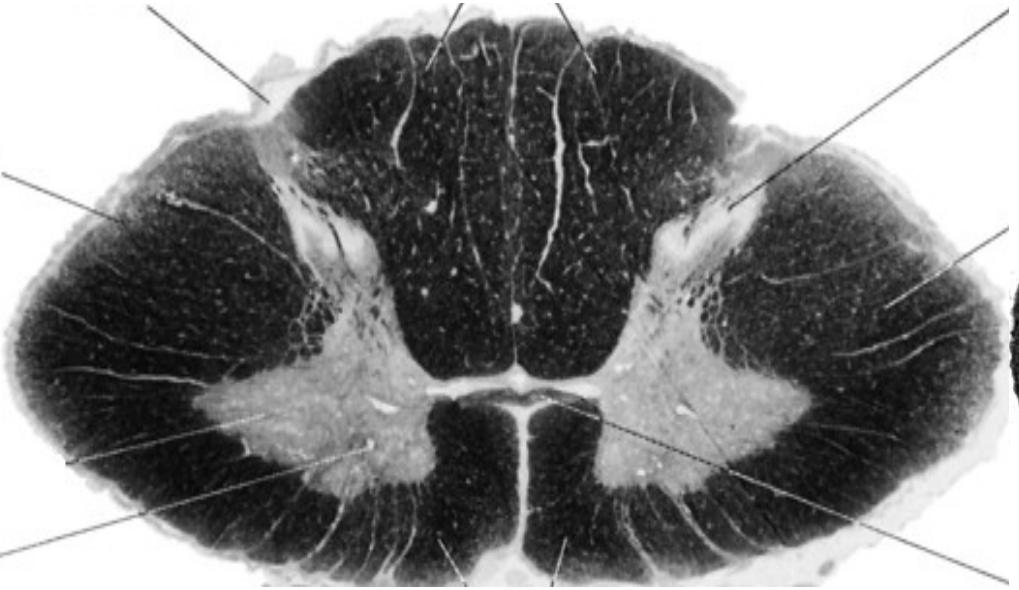
Label the diagrams

Pacinian corpuscle

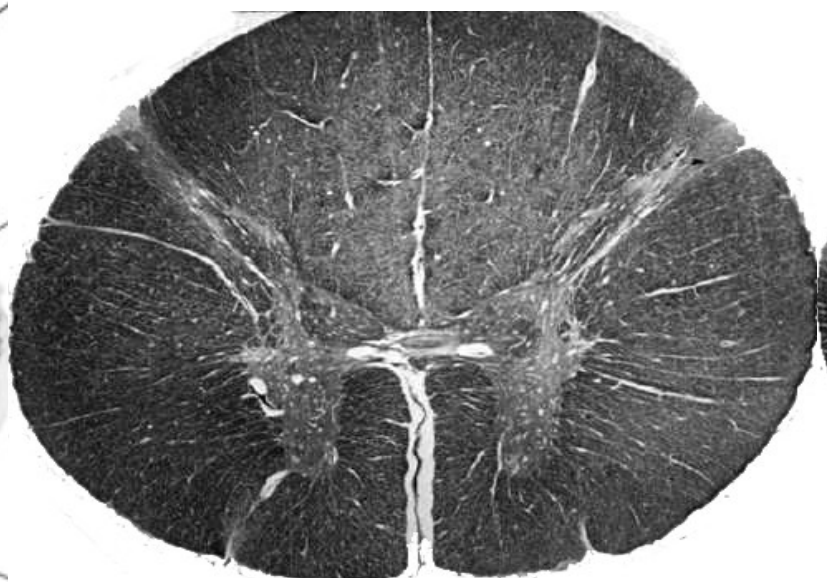


Meissner’s corpuscle…..silver stain

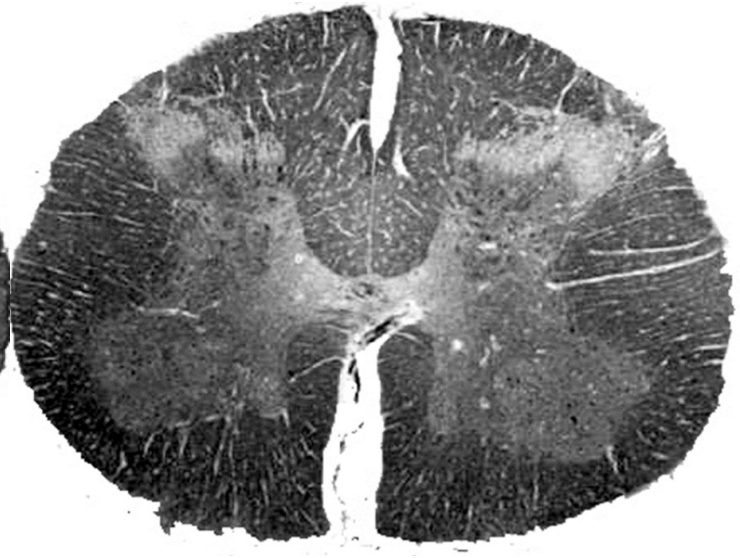
Spinal cord levels …. Weigert Pal stain



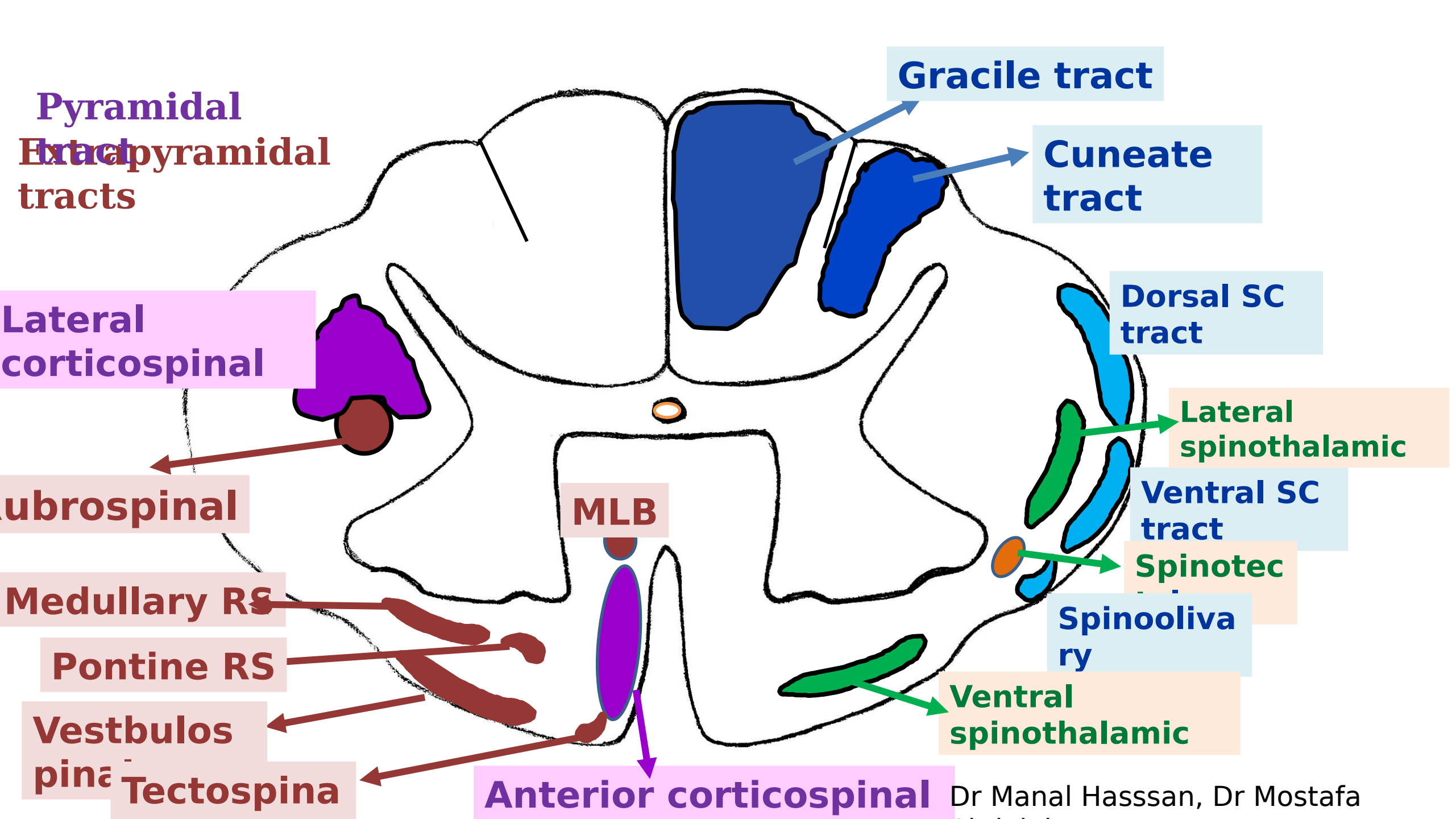
Spinal cord **Cervical level**
Weigert Pal stain



Spinal cord
Thoracic level
Weigert Pal stain



Spinal cord **Lumbar level**
Weigert Pal stain


Pyramidal
Extrapyramidal tracts
Gracile tract
Cuneate tract
Dorsal SC tract
Lateral corticospinal
Lateral spinothalamic
ubrospinal
MLB
Ventral SC tract
Spinotec
Medullary RS
Spinooliva ry
Pontine RS
Ventral spinothalamic
Vestbulos pina
Tectospina
Anterior corticospinal

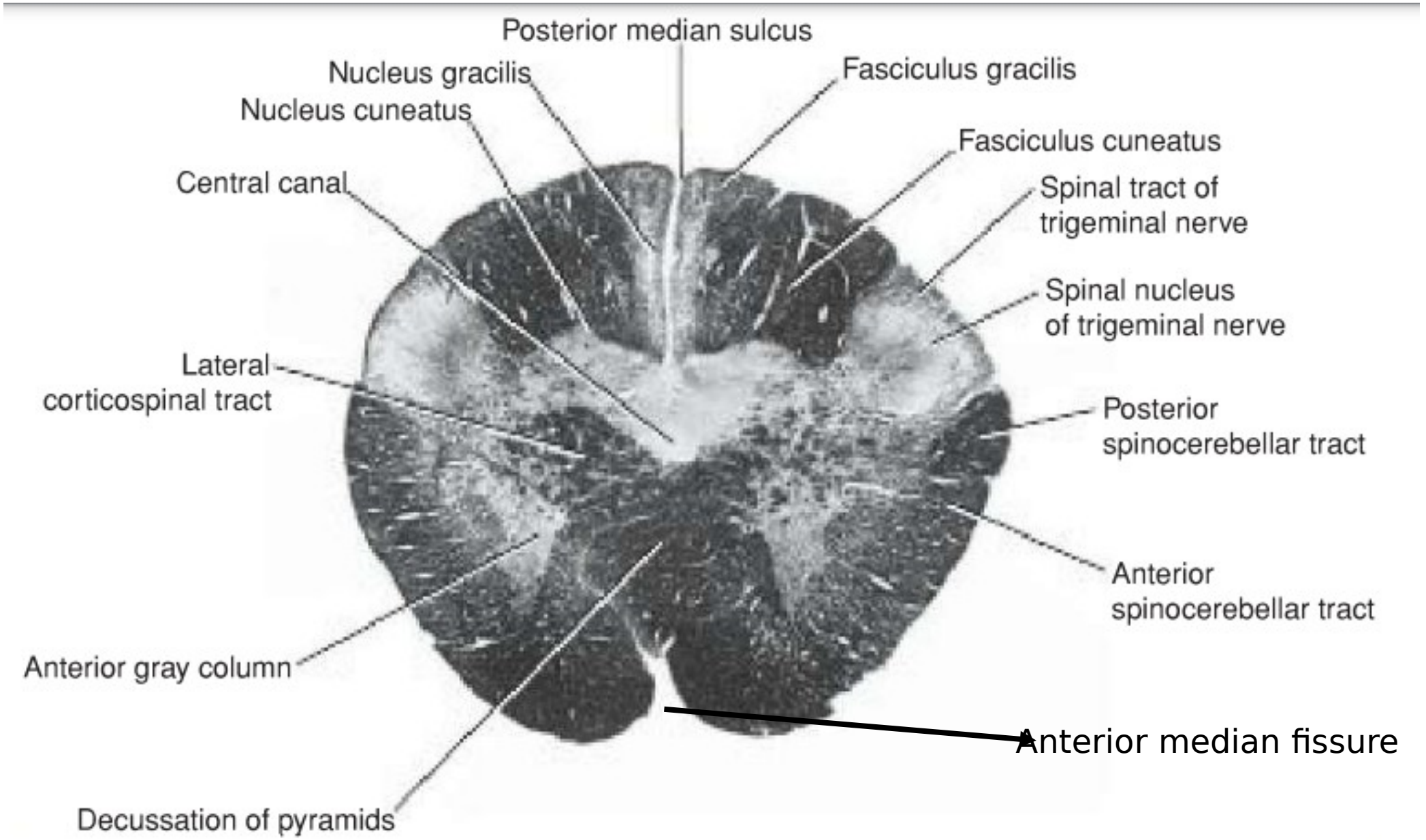
Medulla -Wiegert Pal Stain

Closed medulla at level of Motor decussation
Weigert Pal stain

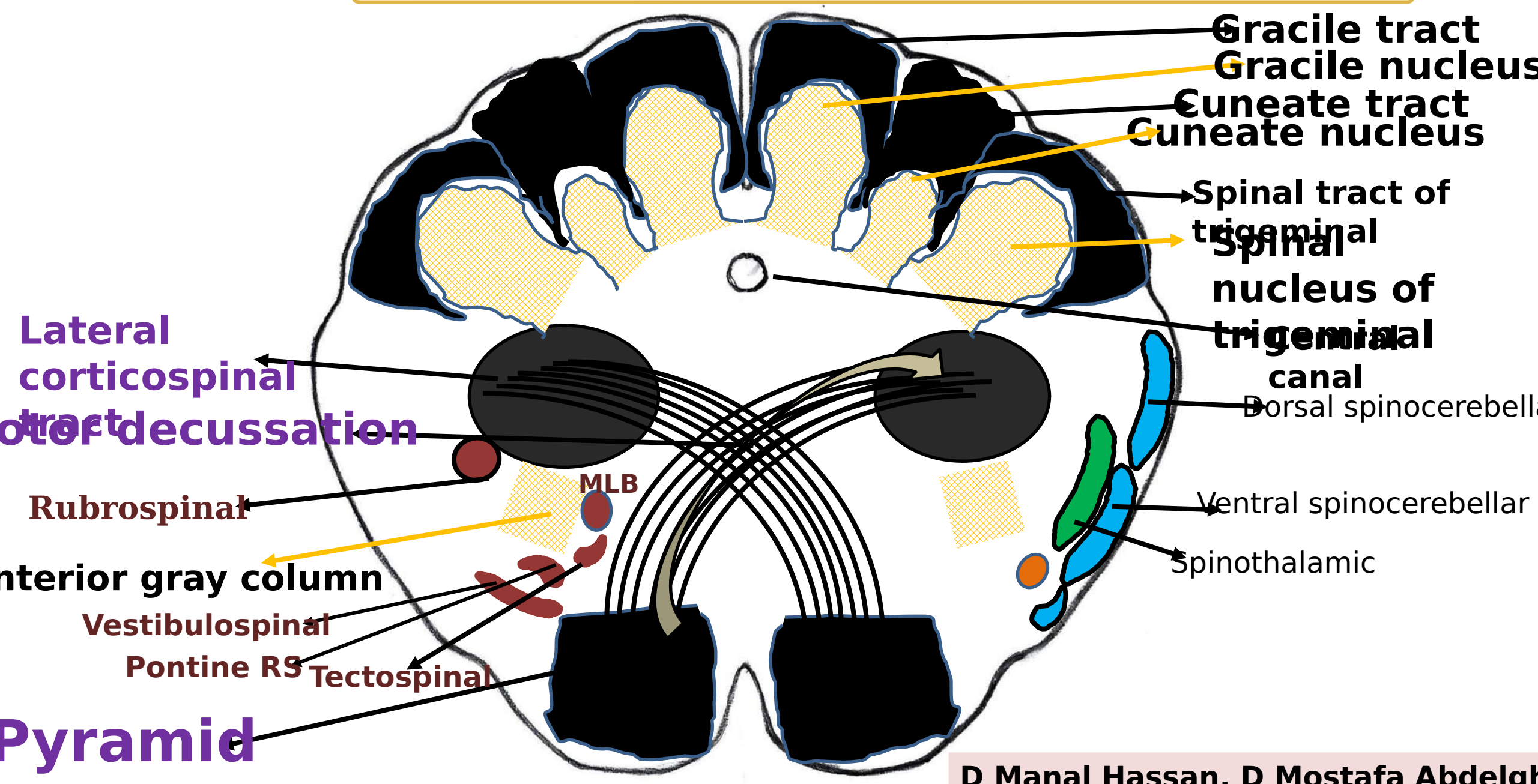
Closed medulla at level of Sensory decussation
Weigert Pal stain

Open medulla
Weigert Pal stain

Closed medulla at level of motor decussation

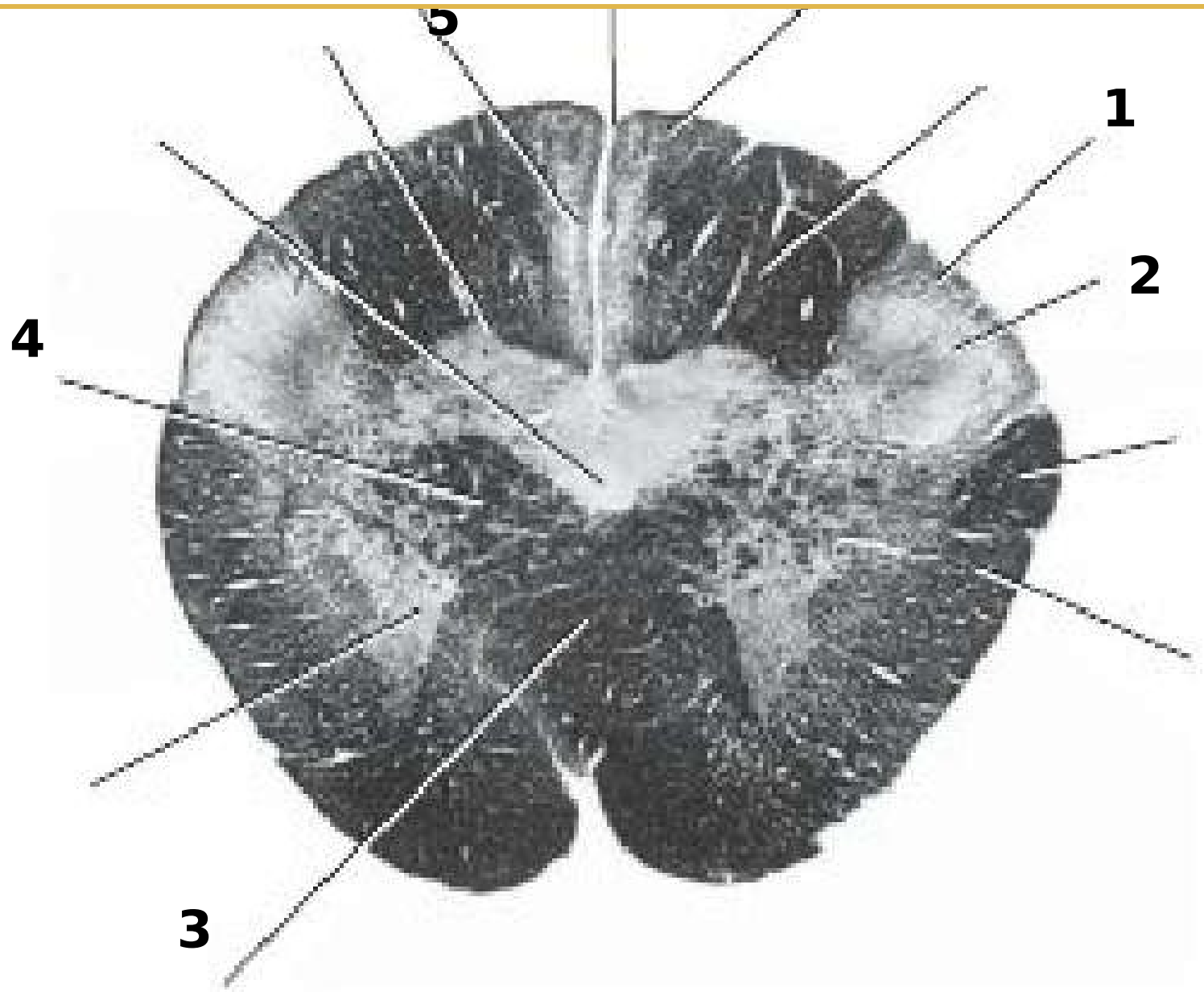


Closed medulla at level of motor decussation

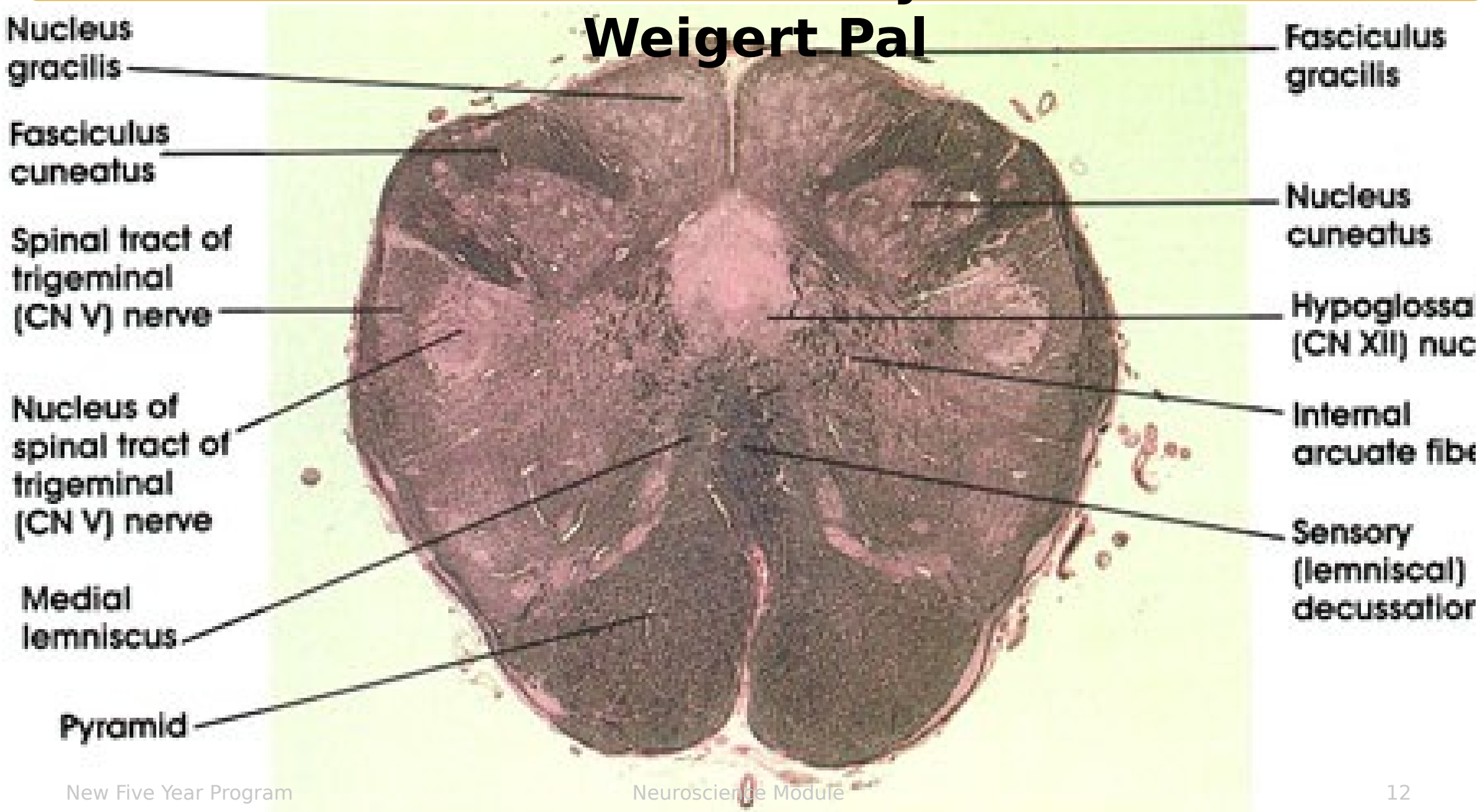


D Manal Hassan, D Mostafa Abdelgh

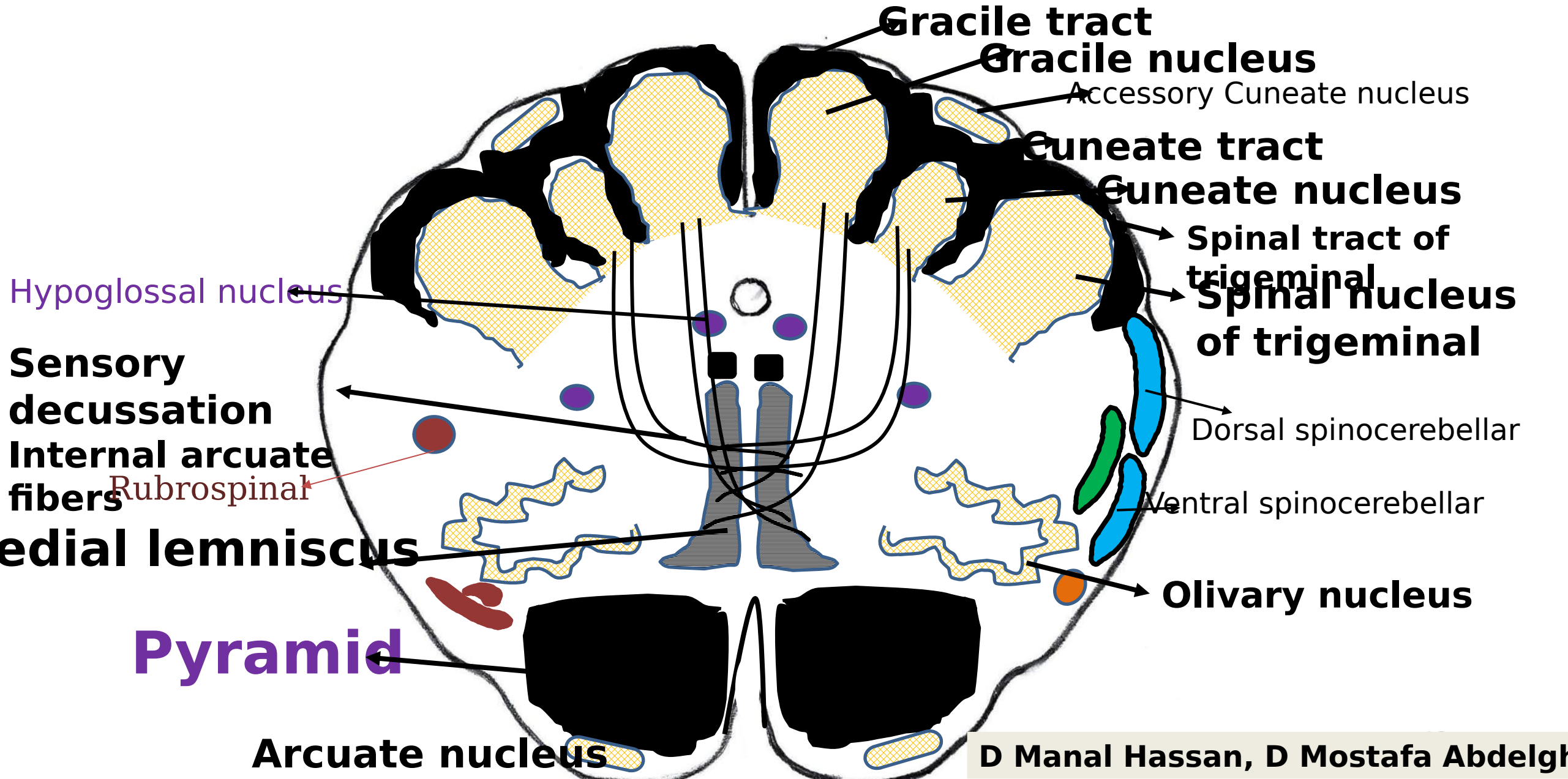
Closed medulla at level of motor decussation
Weigert Pal stain



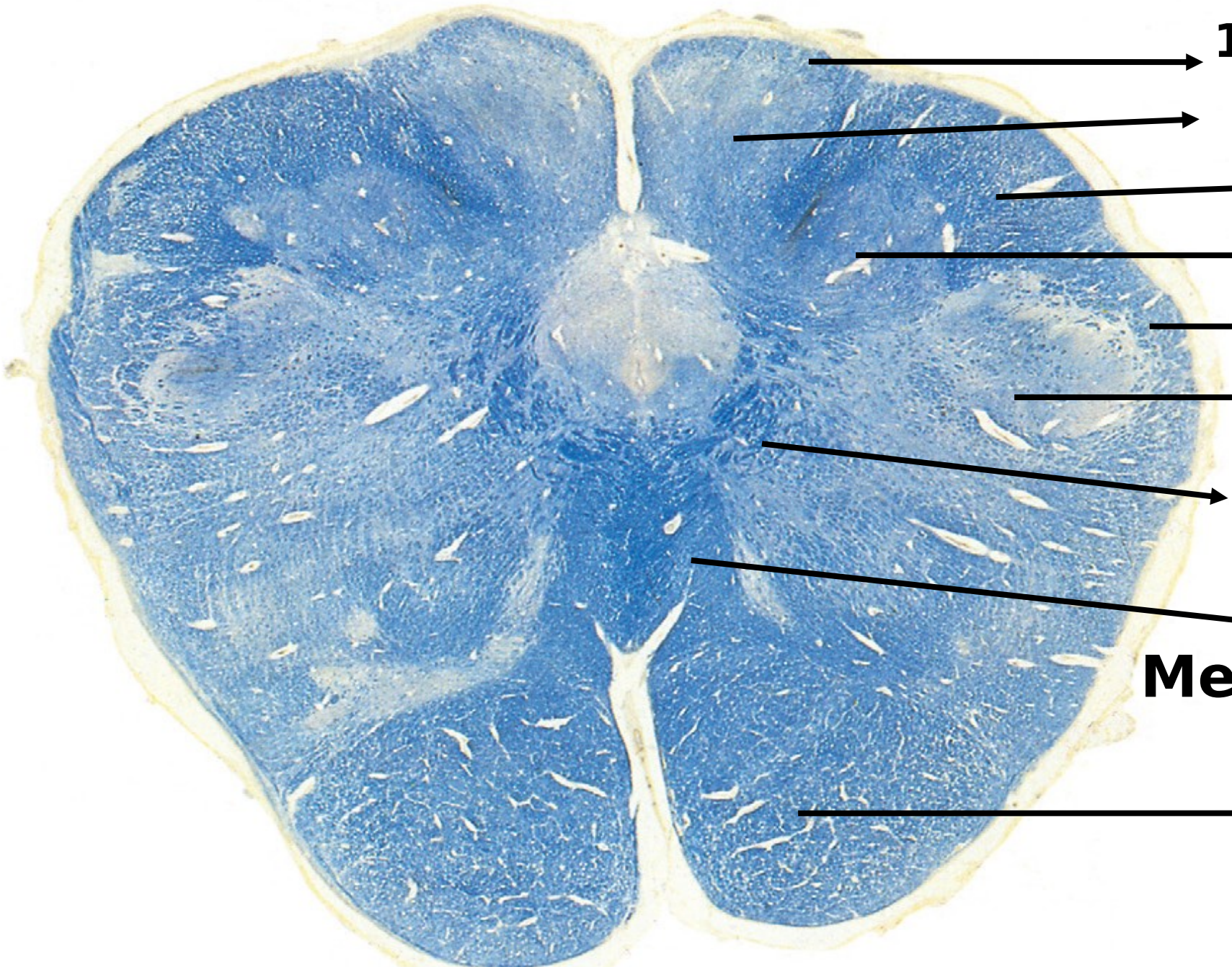
Closed Medulla----- Sensory decussation -- Weigert Pal

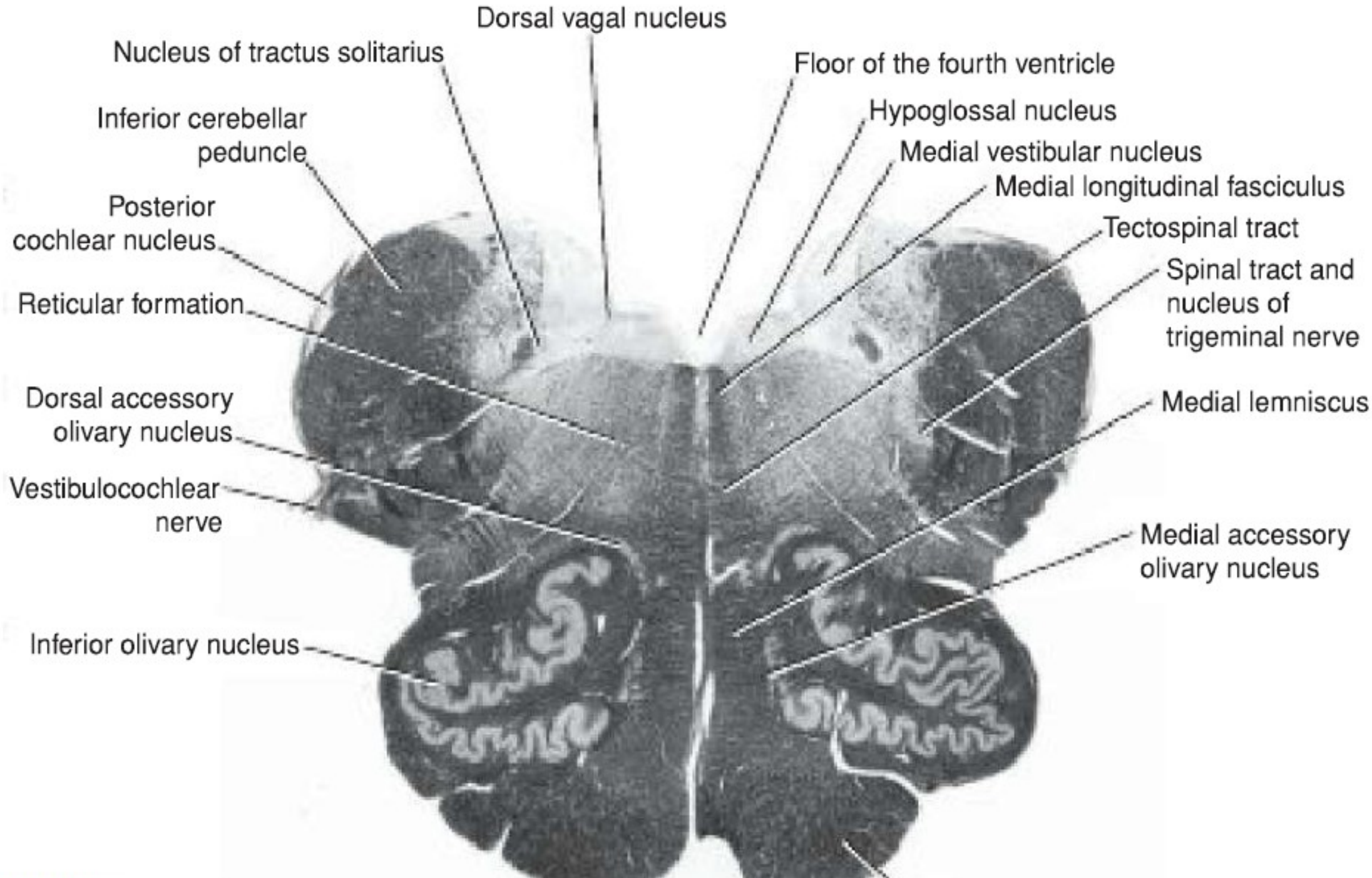


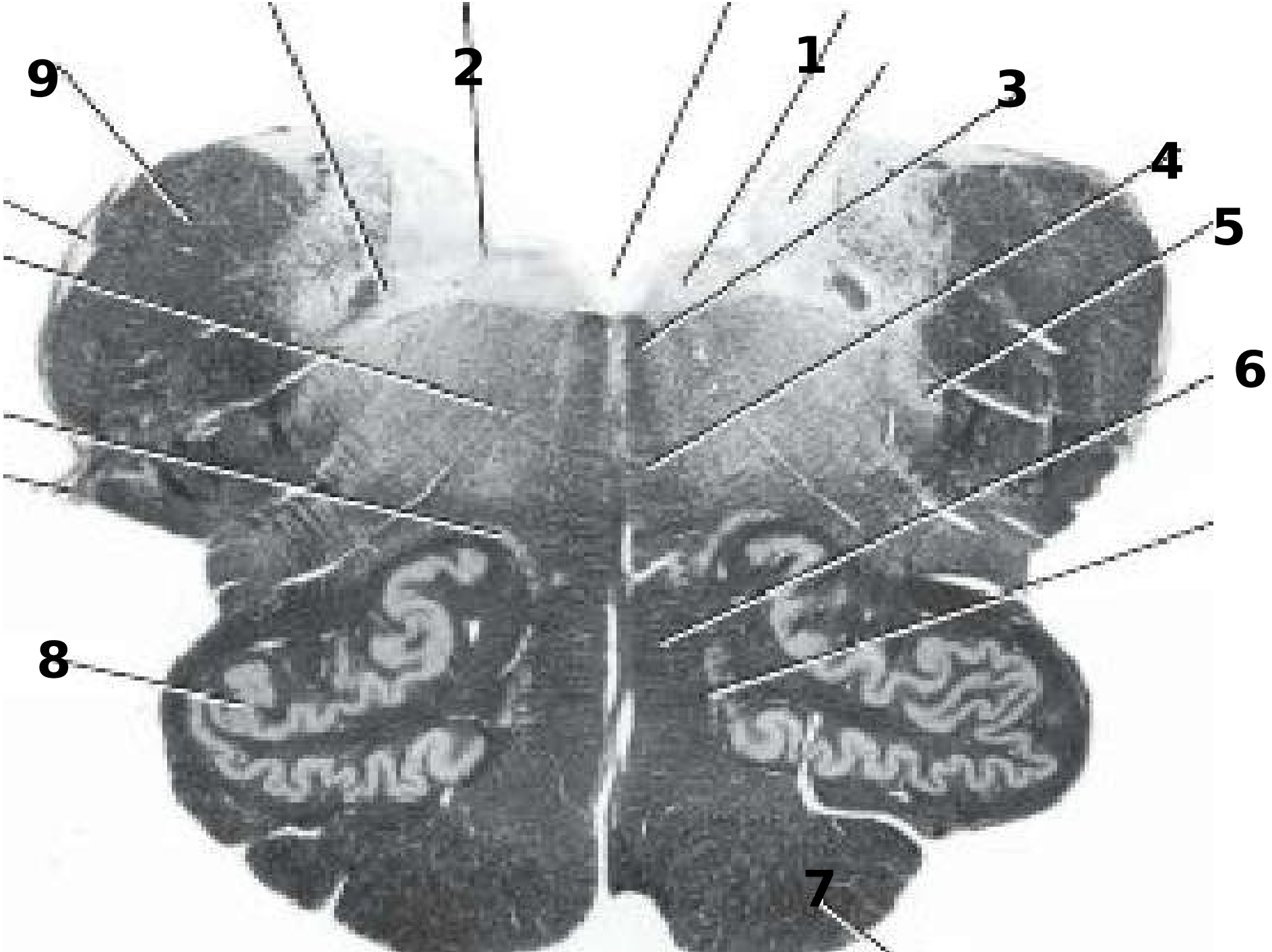
Closed Medulla----- Sensory decussation



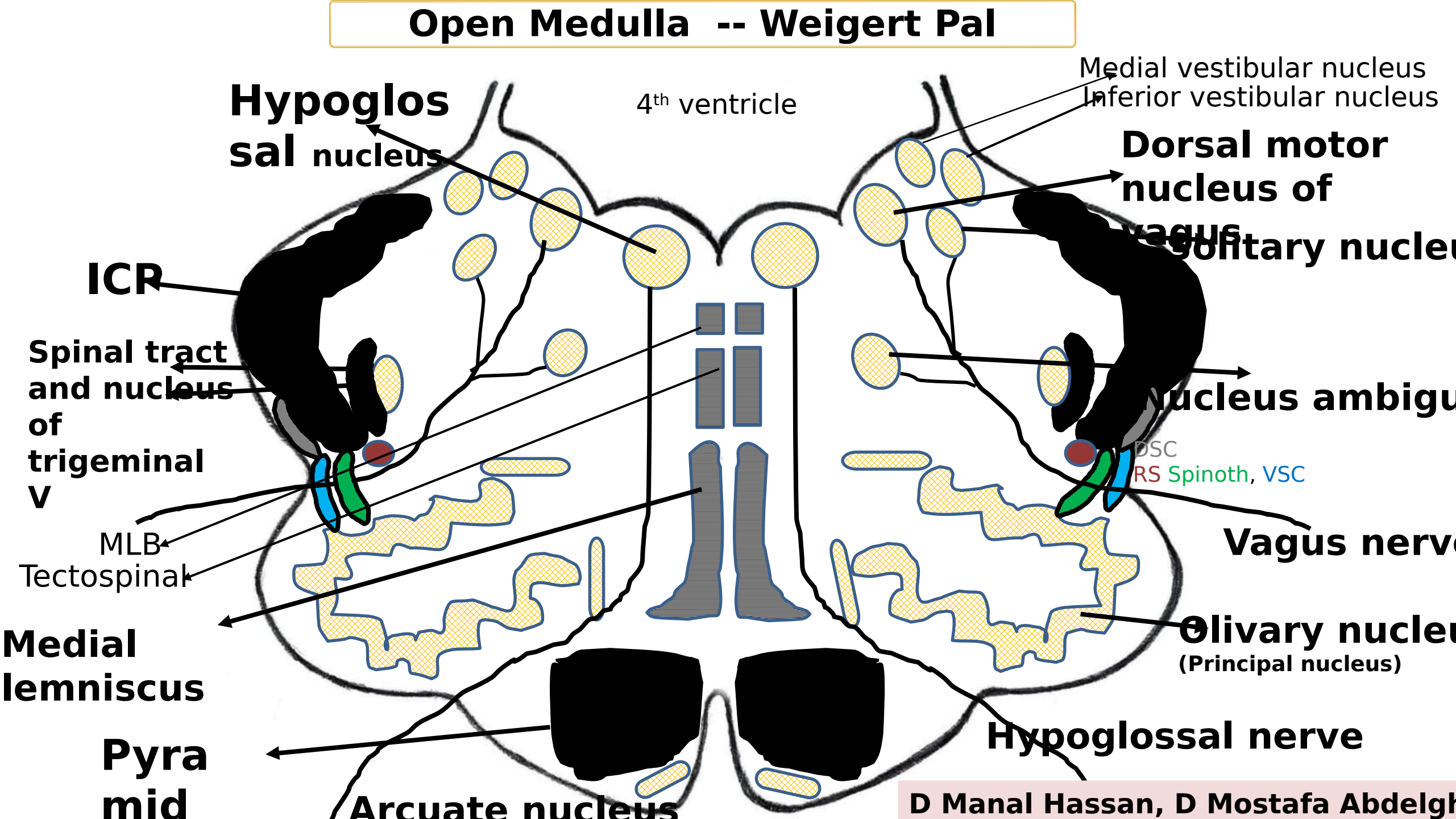
D Manal Hassan, D Mostafa Abdelgh


1 Gracile tract
2 Gracile nucleus
3 Cuneate trac
4 Cuneate nucleu
5 Spinal tract of trigeminal
6 Spinal nucleus of trigeminal
7 Sensory decussation
8 Internal arcuate fibers
Medial lemniscu
9
Pyramid


Dorsal vagal nucleus
Nucleus of tractus solitarius
Floor of the fourth ventricle
Inferior cerebellar peduncle
Hypoglossal nucleus
Medial vestibular nucleus
Medial longitudinal fasciculus
Posterior cochlear nucleus
Tectospinal tract
Spinal tract and nucleus of trigeminal nerve
Reticular formation
Dorsal accessory olivary nucleus
Medial lemniscus
Vestibulocochlear nerve
Medial accessory olivary nucleus
Inferior olivary nucleus

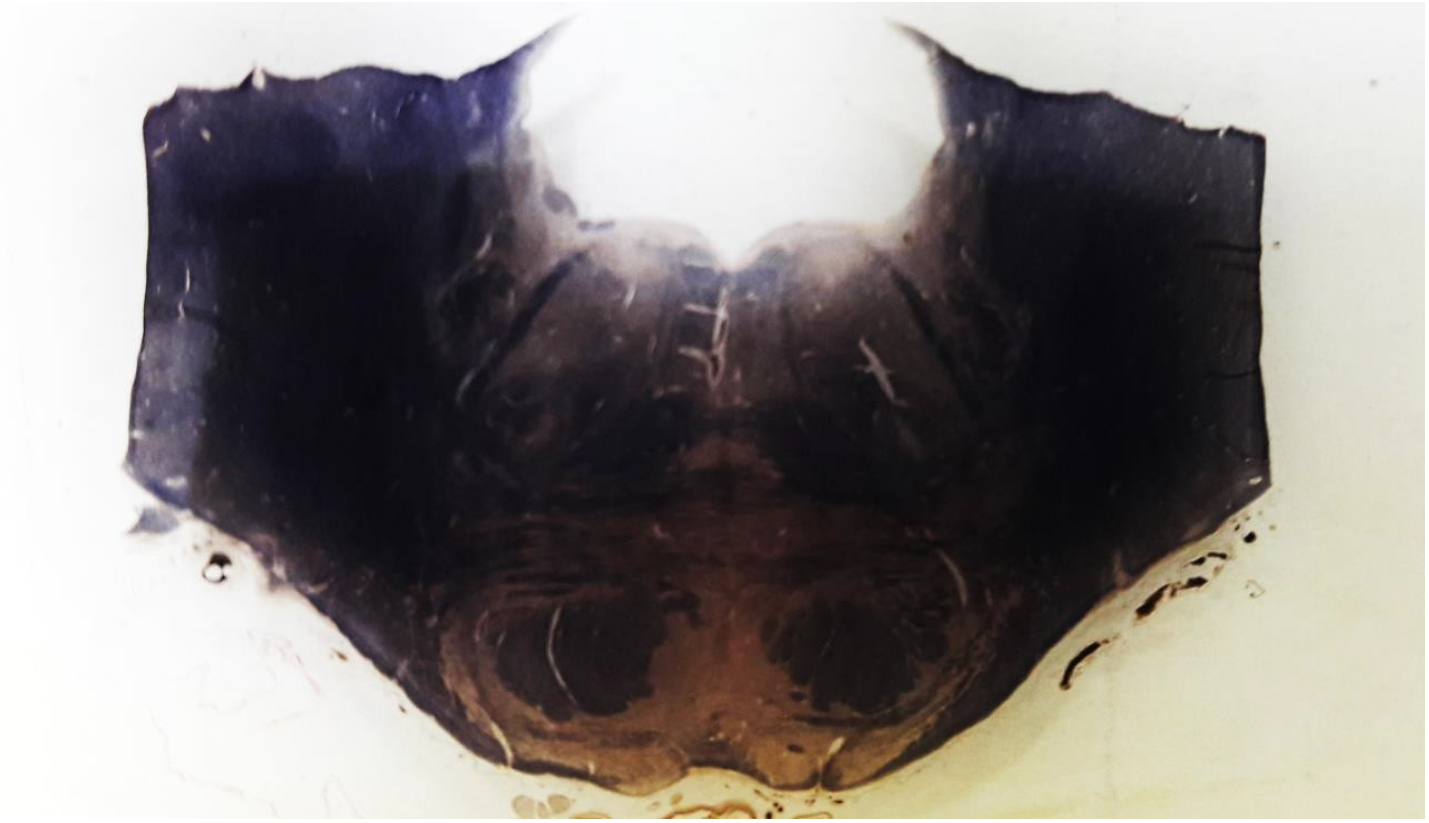

9
2
1
3
4
5
6
8
7

Open Medulla -- Weigert Pal



D Manal Hassan, D Mostafa Abdelgh

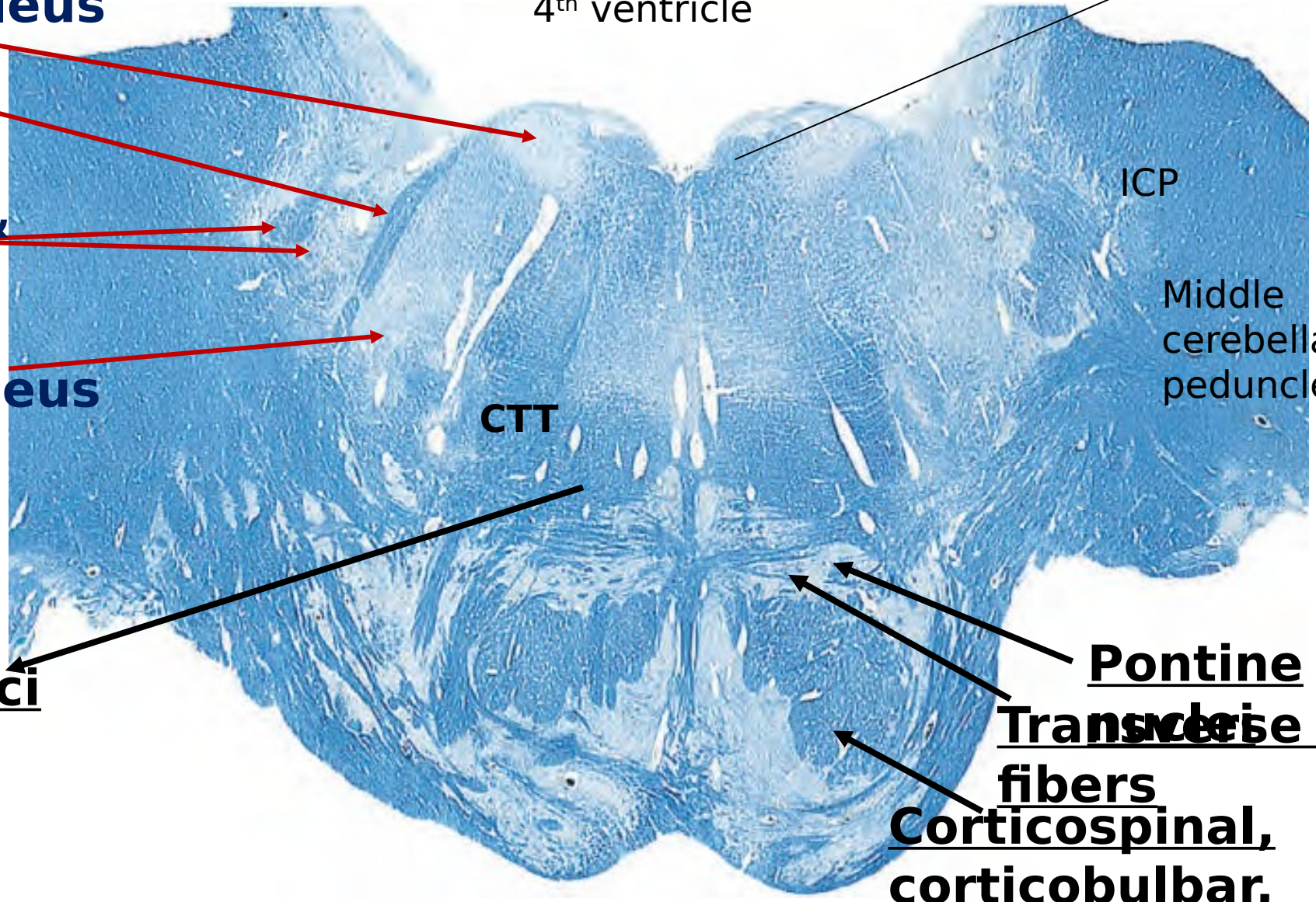
Levels of Pons …. Weigert Pal stain



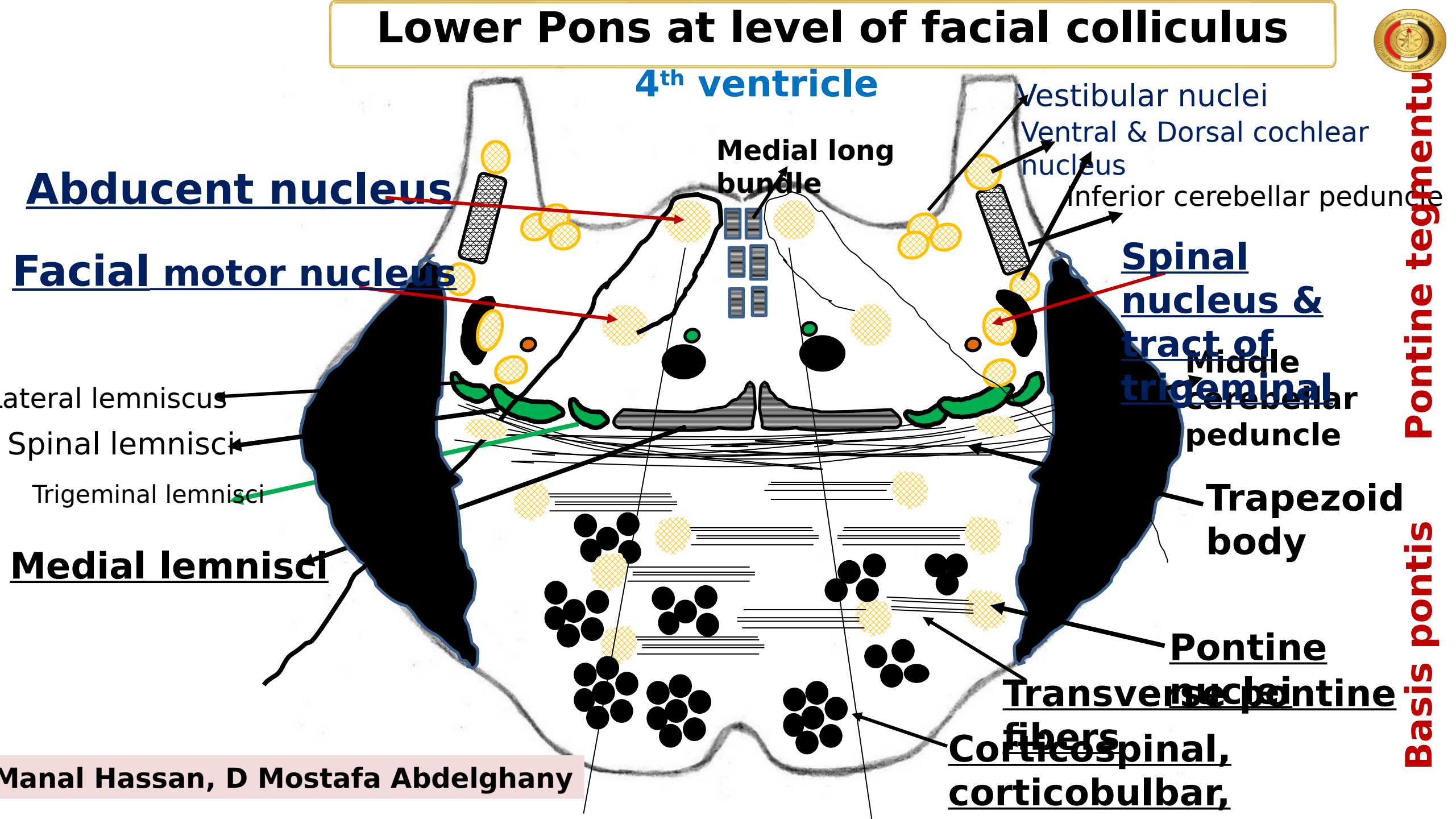
Lower Pons at level of facial colliculus
Weigert Pal stain

Rostral Pons at level of trigeminal
Weigert Pal stain

Inferior level of Pons ---- level of facial colliculus

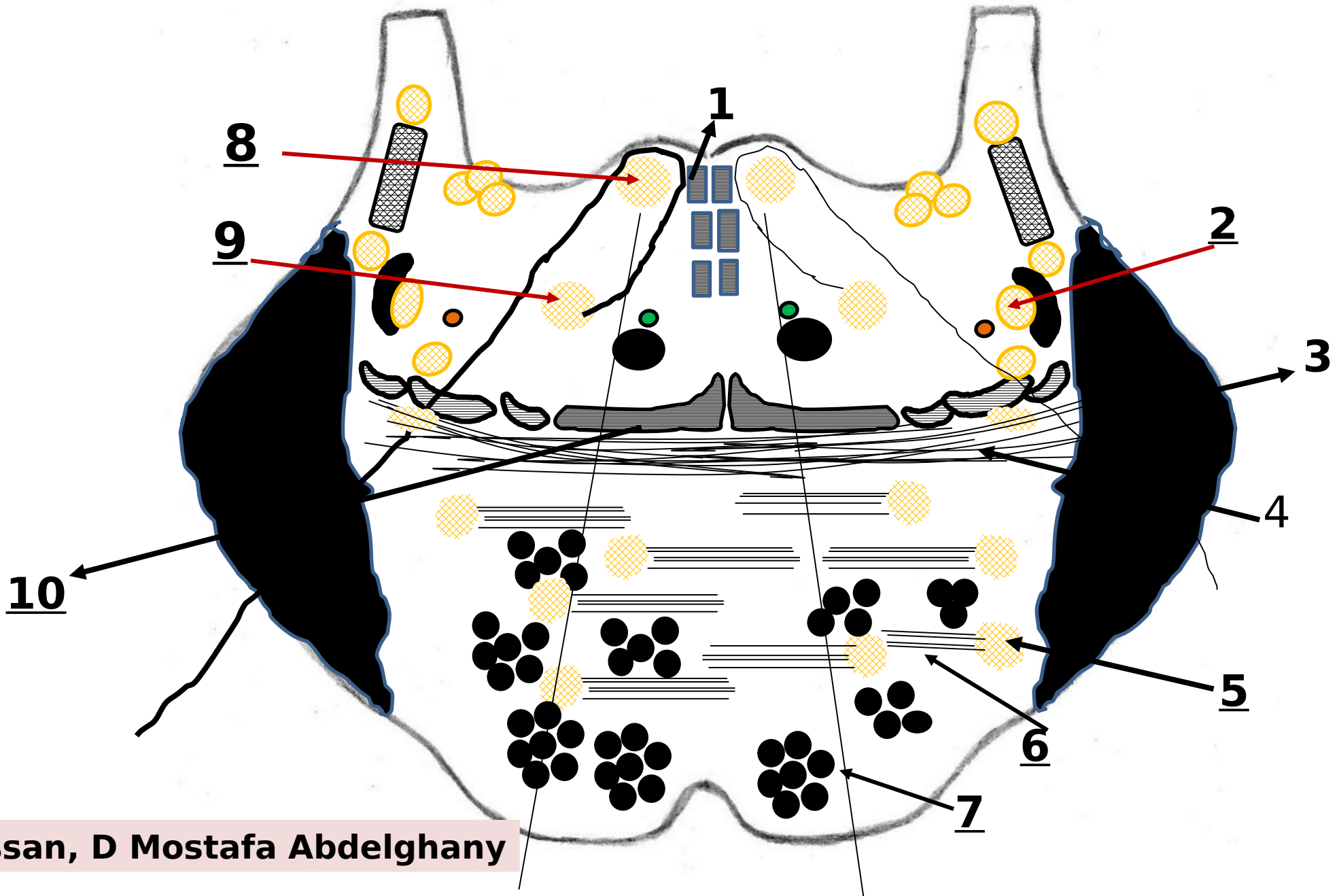


Lower Pons at level of facial colliculus



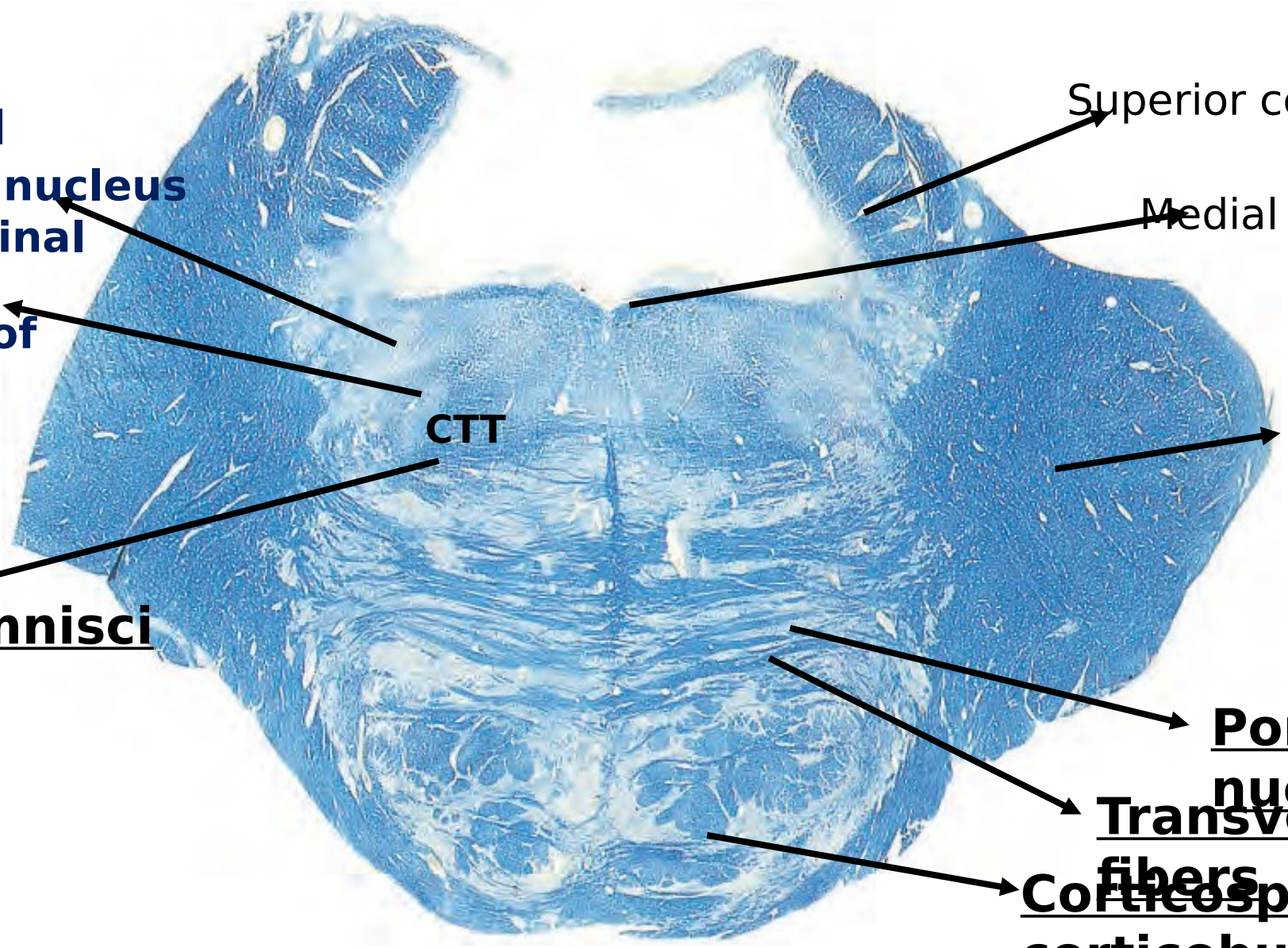
Manal Hassan, D Mostafa Abdelghany

Identify the level and label it



Manal Hassan, D Mostafa Abdelghany

Rostral Pons at level of Trigeminal ….Weigart Pal stain



Principal Sensory nucleus of trigeminal

Motor nucleus of trigeminal

CTT

Medial lemnisci

Superior cerebellar peduncle

Medial longitudinal bundle

Middle cerebellar peduncle

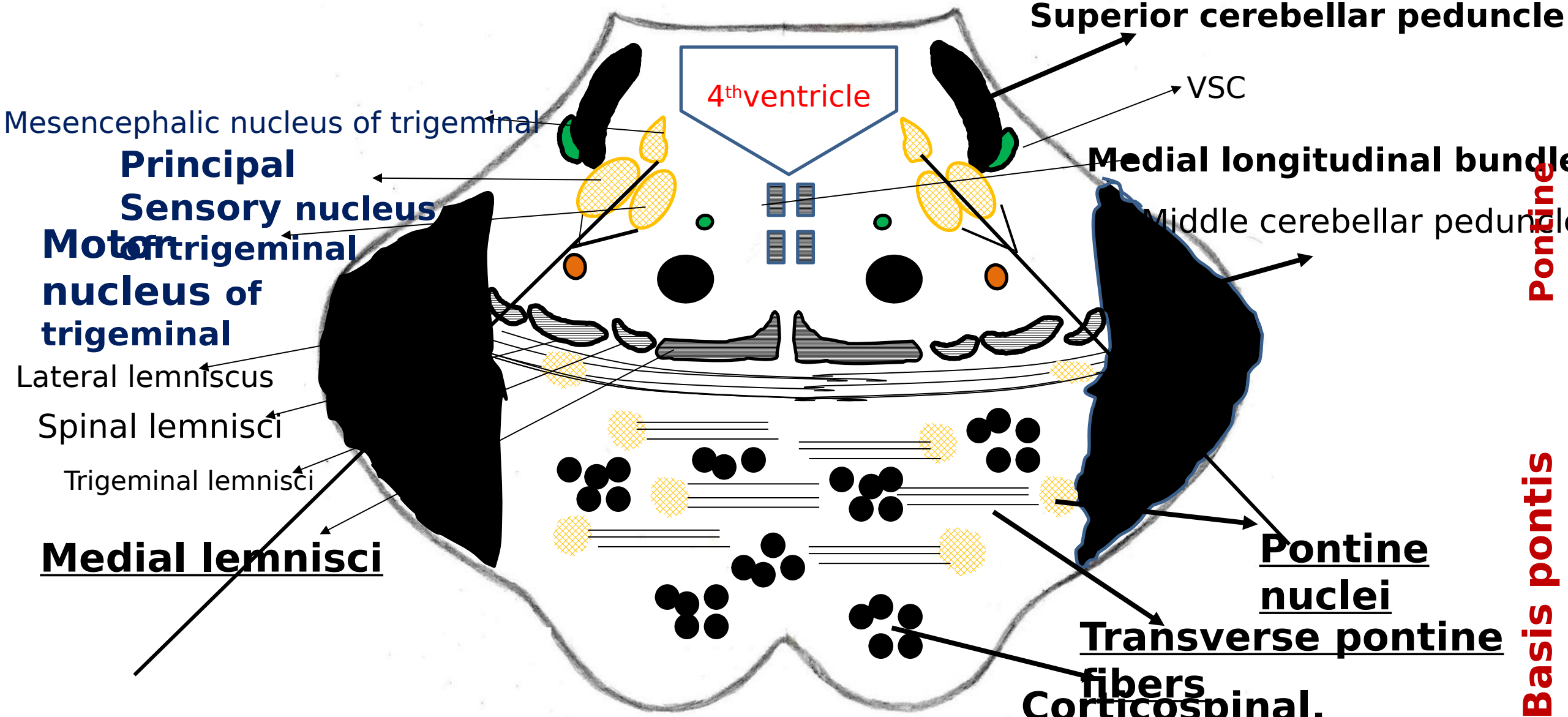
Pontine nuclei

Transverse pontine fibers

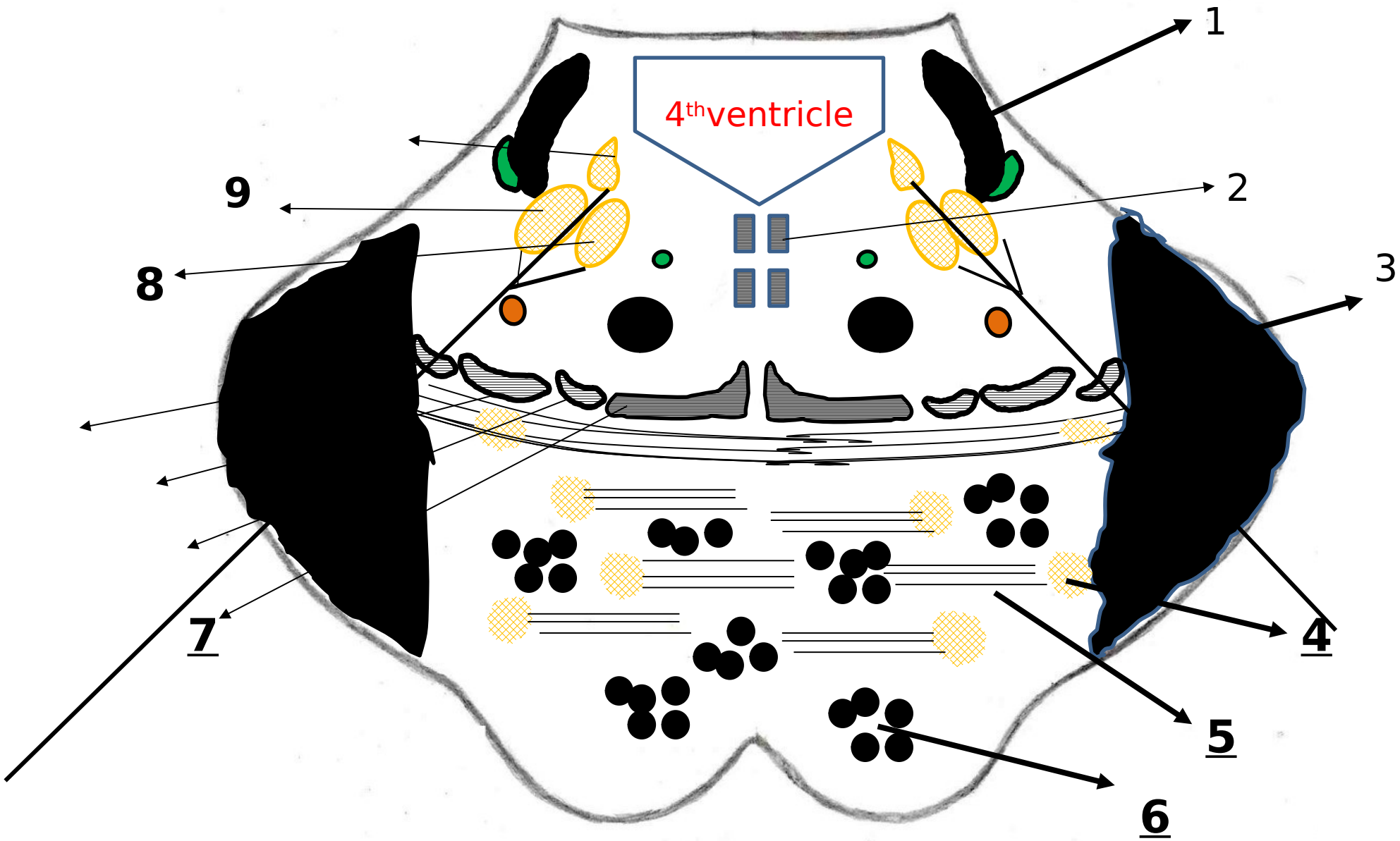
Corticospinal, corticobulbar,

Basis pontis Pontine tegmentum

Rostral Pons at level of Trigeminal



Identify and label

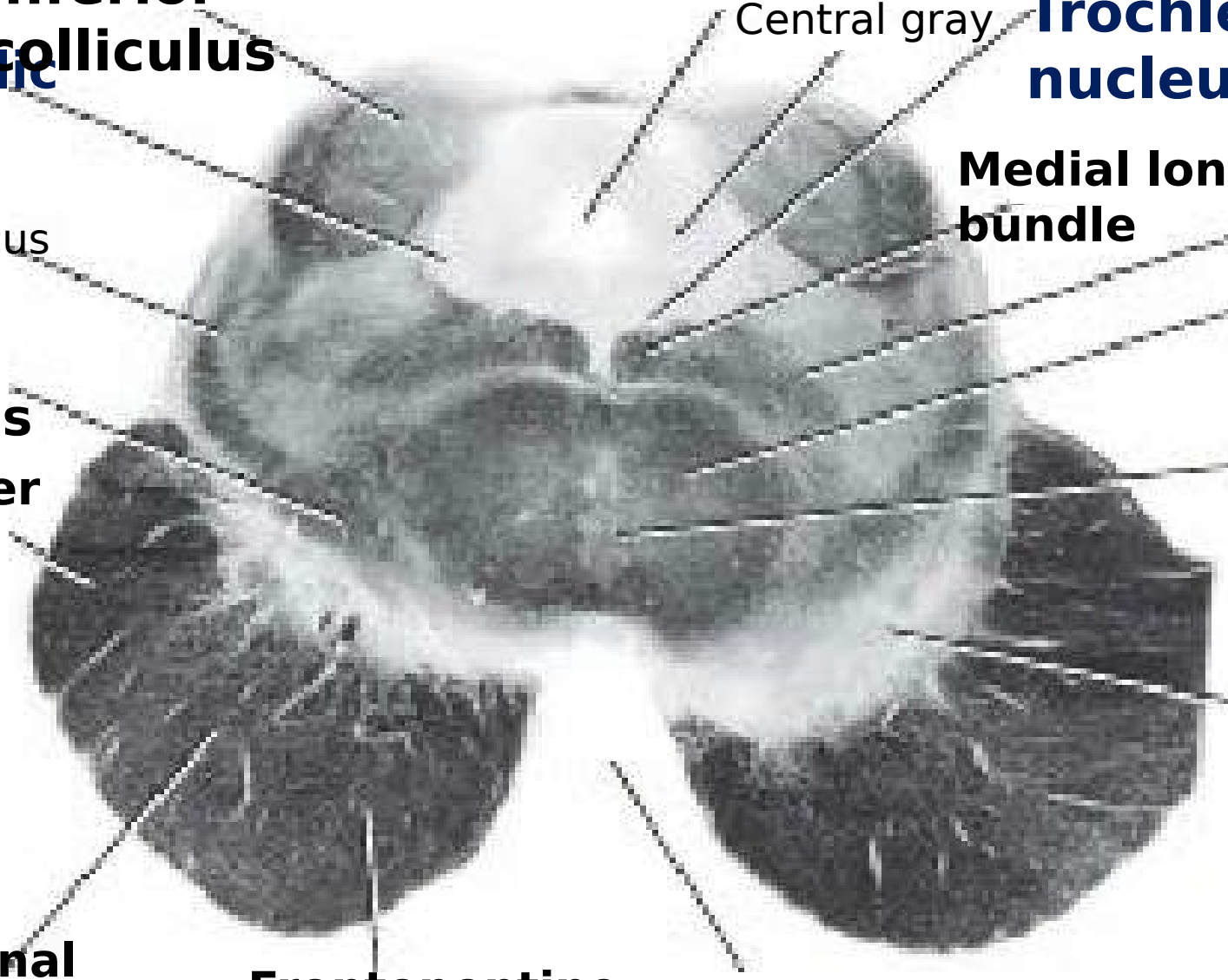


Levels of midbrain…Weigert Pal stain

Inferior level of midbrain

Superior level of midbrain

Inferior level of Midbrain ….. Weigert Pal stain



Cerebral aqueduct of Sylvius

Central gray

Inferior colliculus

Trochlear nerve nucleus

Mesencephalic nucleus of trigeminal

Lateral lemniscus

Medial longitudinal bundle

RF

Medial lemniscus

Parieto-,Tempero-, Occipto-pontine fibers

Decussation of superior cerebellar peduncle

Substantia nigra

Corticospinal fibers

Corticobulbar

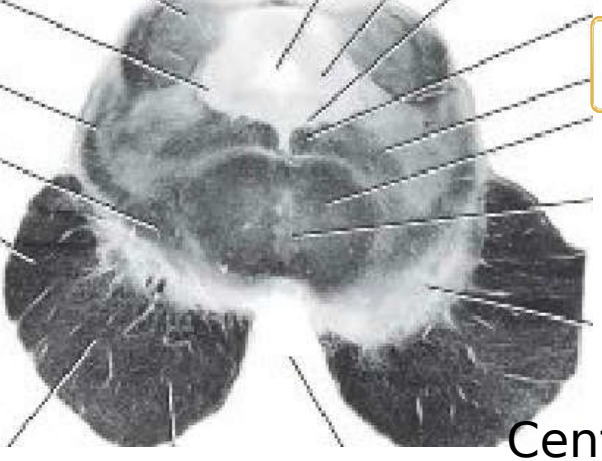
Frontopontine fibers

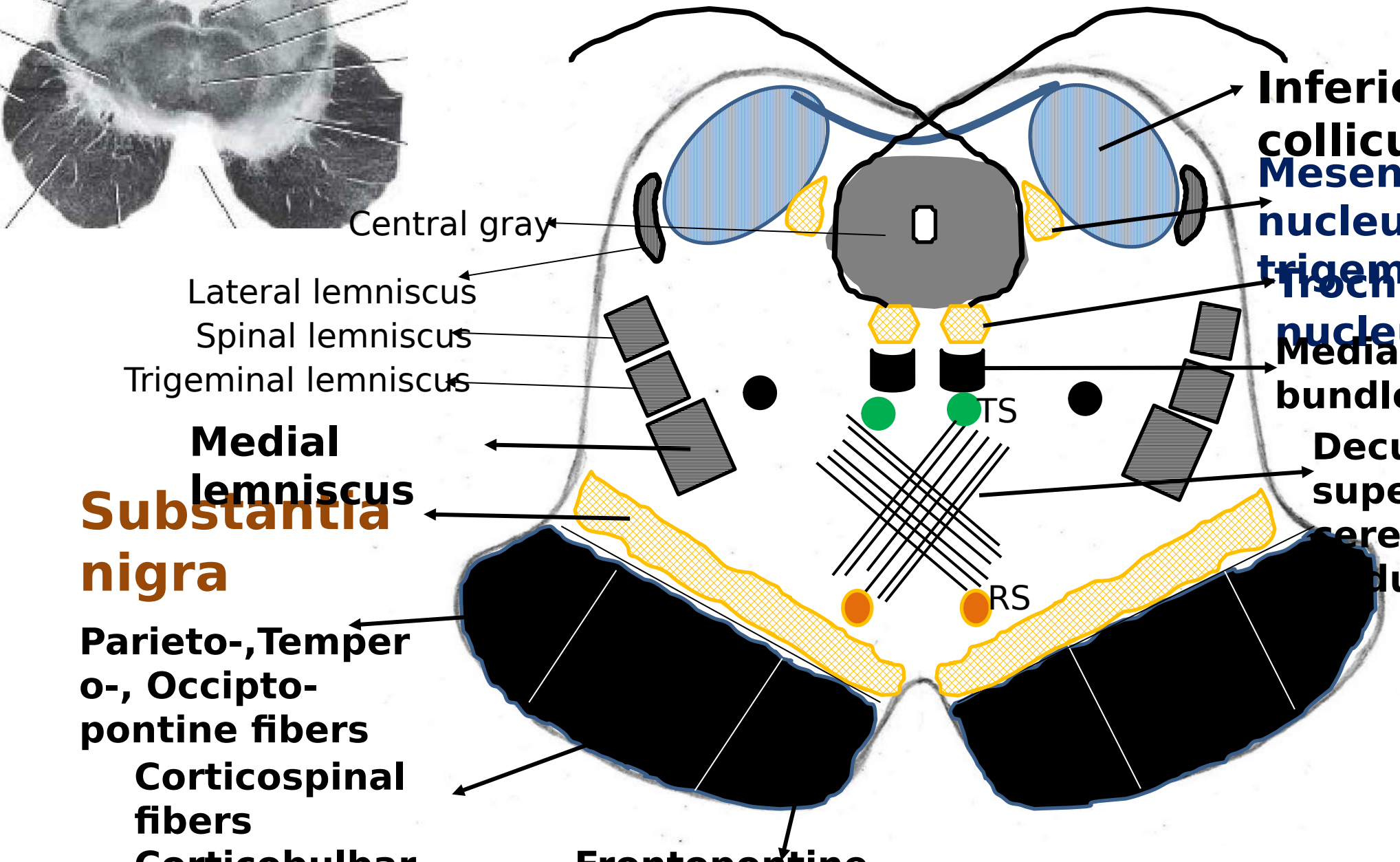
Tectum

Tegmentum

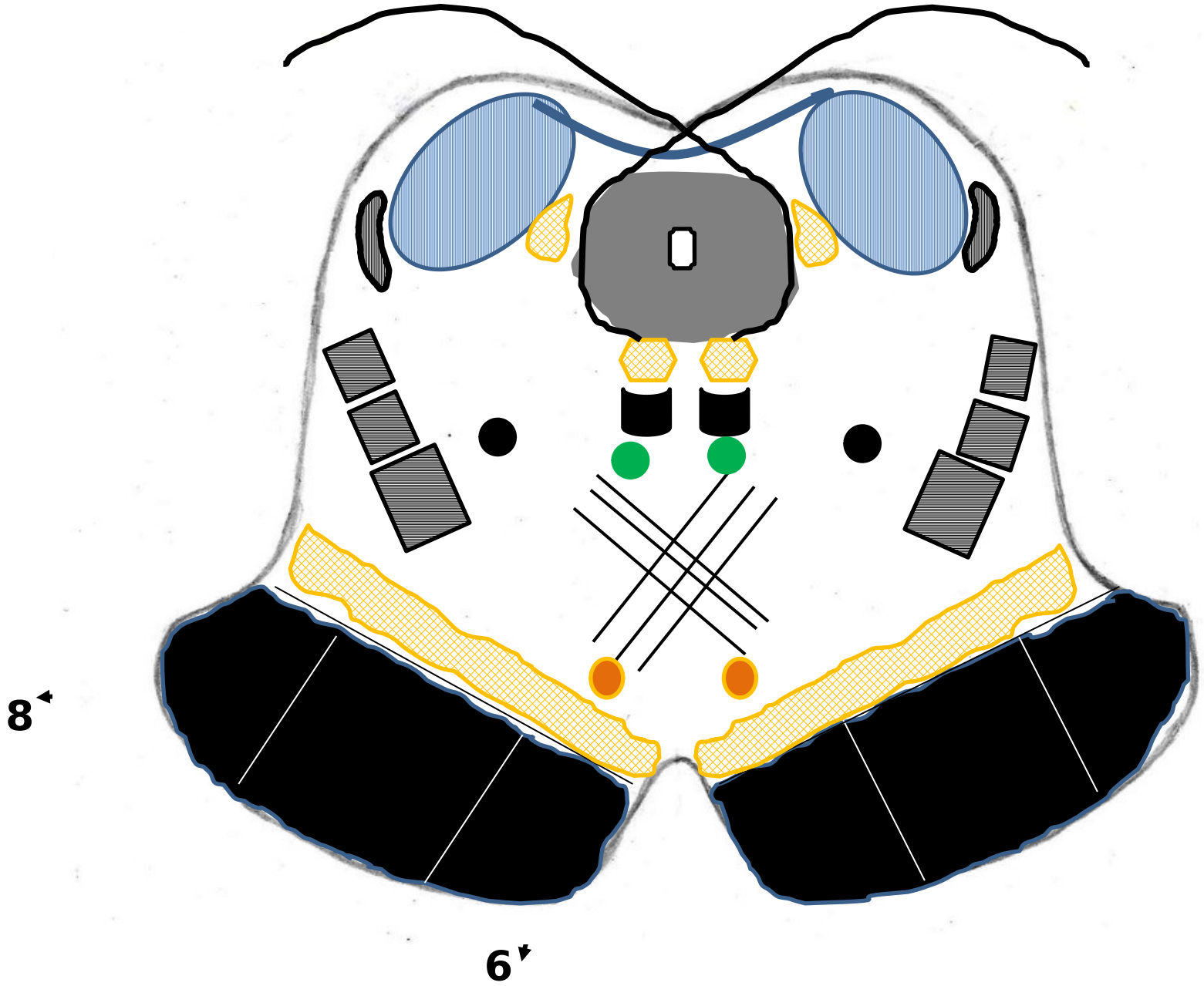
Crus cerebri

Inferior level of Midbrain

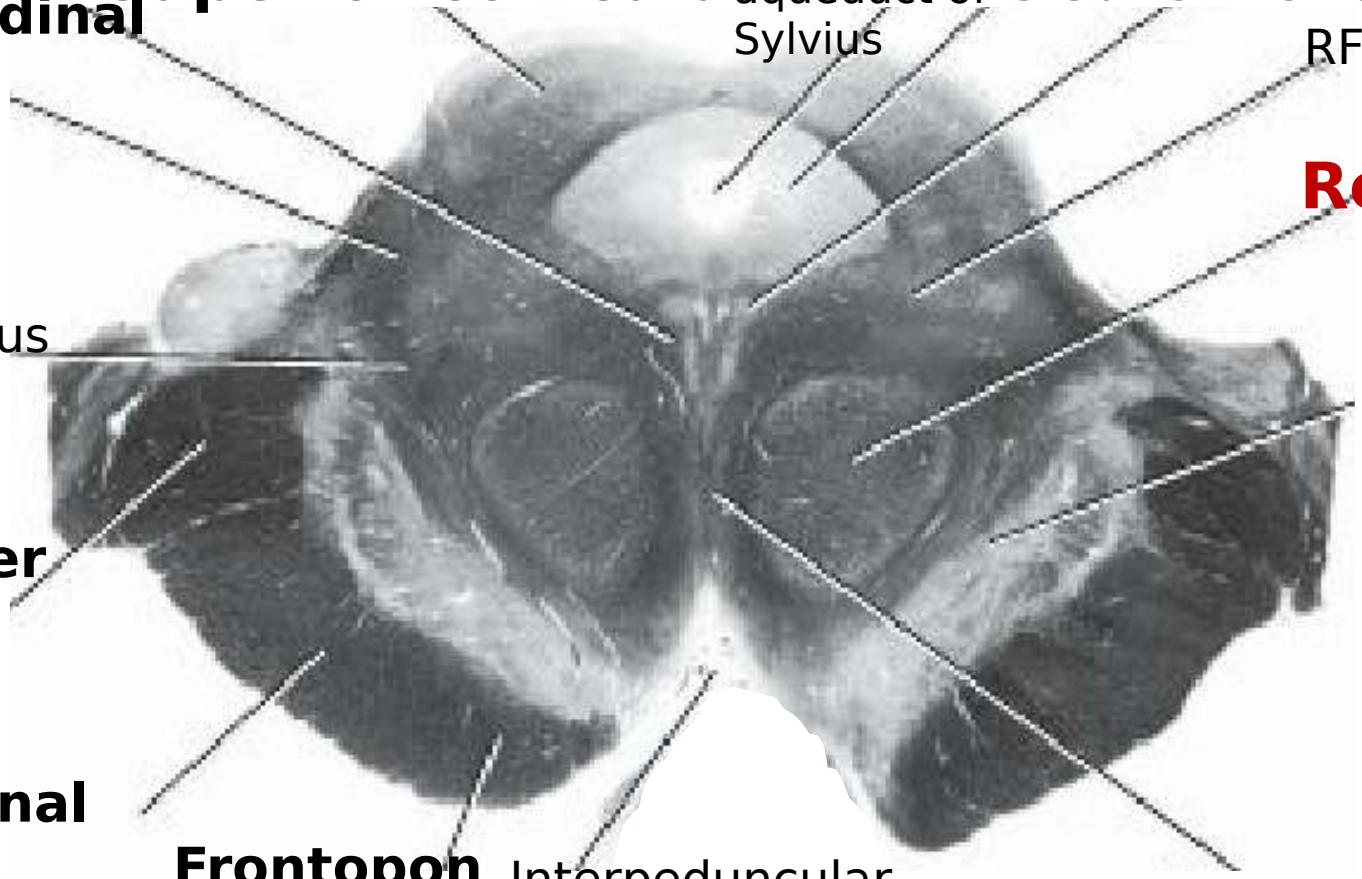




Inferior level of Midbrain



Superior level of Midbrain



Superior colliculus

Cerebral aqueduct of Sylvius

Oculomotor nucleus

RF

Red nucleus

Substantia nigra

Tectum

Tegmentum

Crus cerebri

Medial longitudinal bundle

Medial Lemniscus

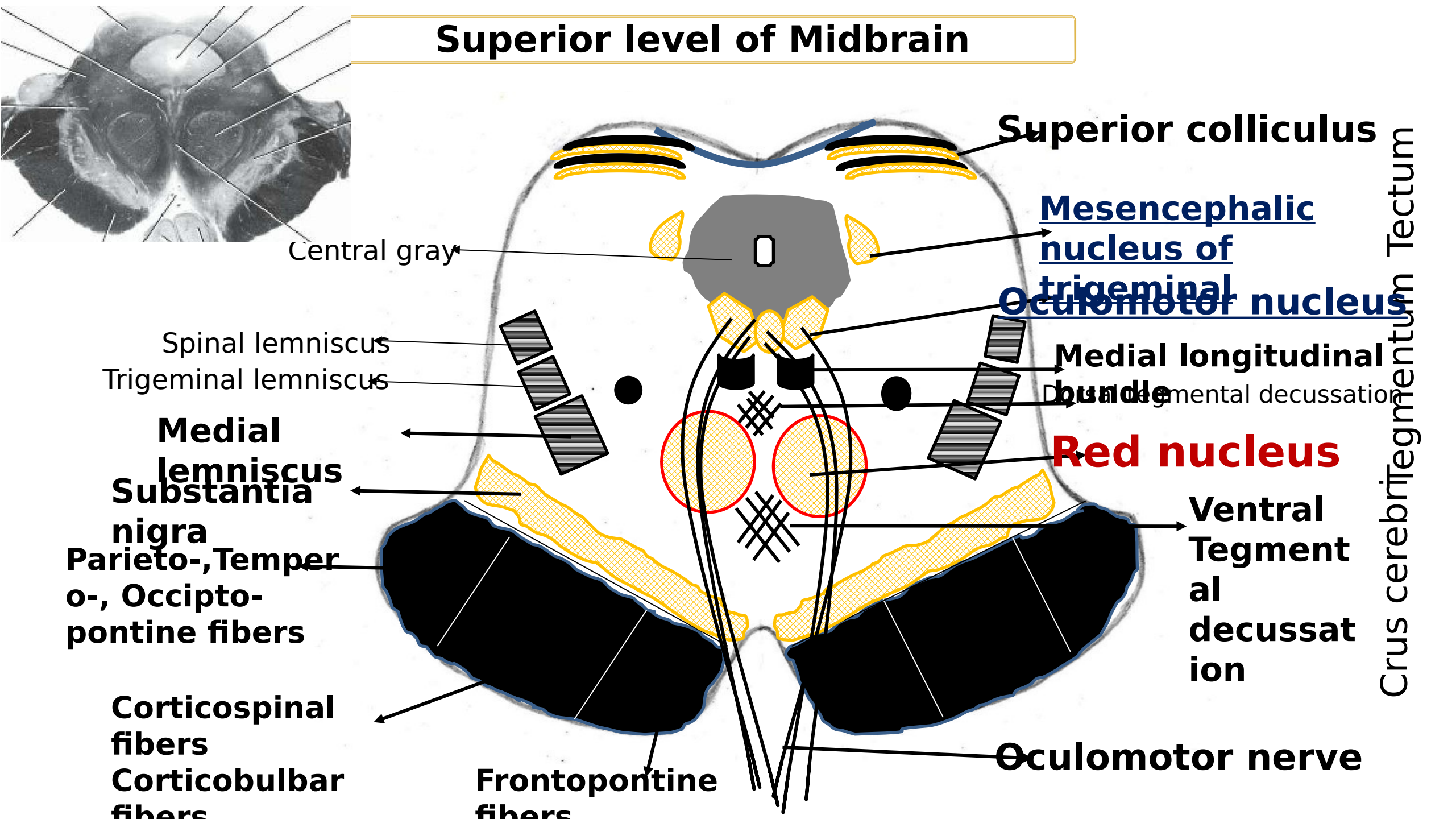
Parieto-,Temper o-, Occipto-pontine fibers

Corticospinal fibers
Corticobulbar fibers

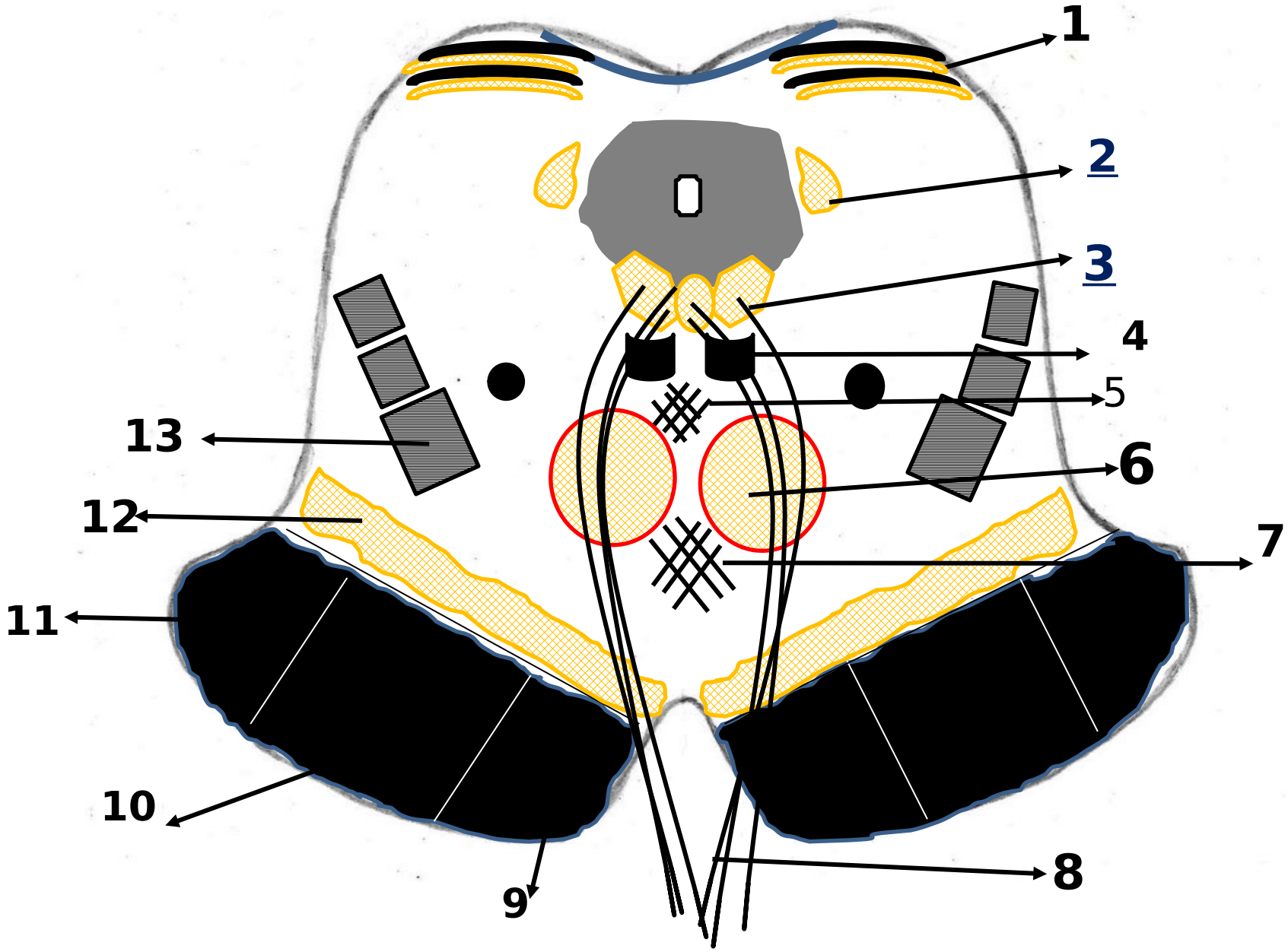
Frontopon tine fibers

Interpeduncular fossa

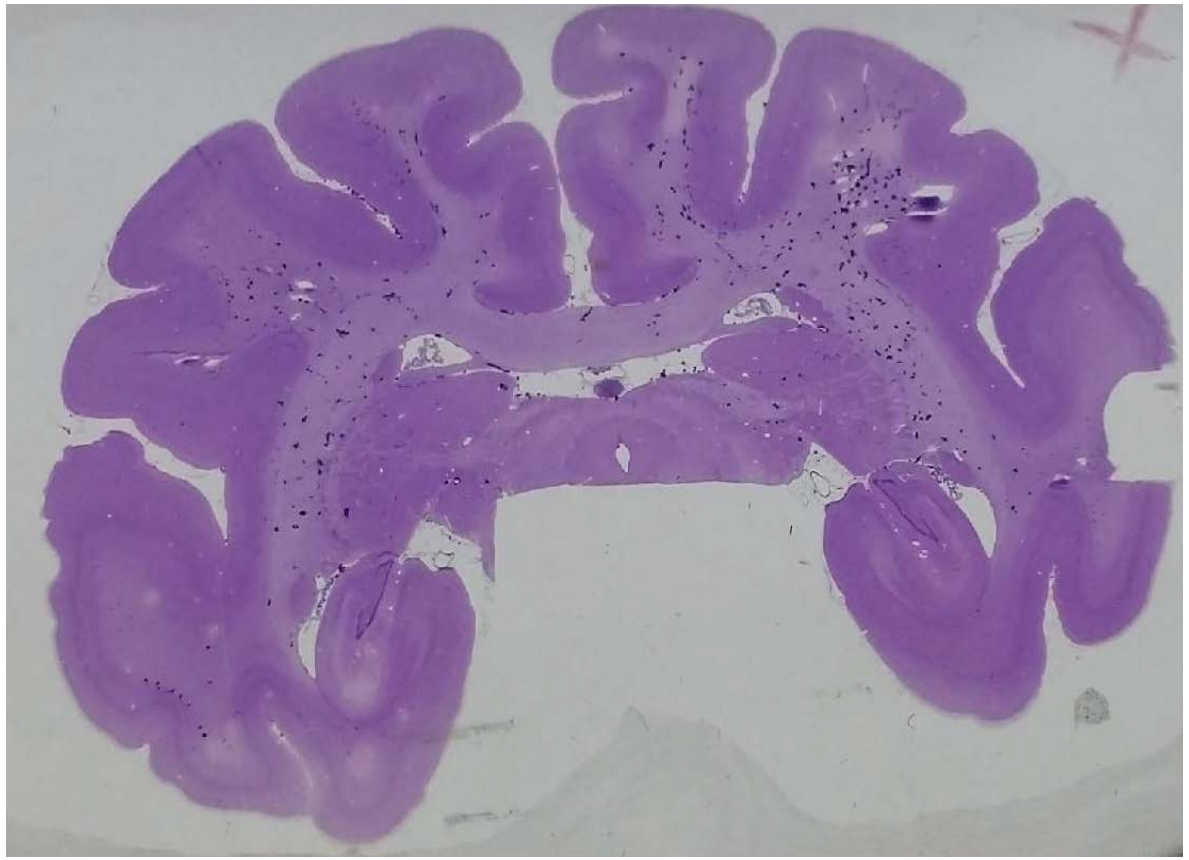
Superior level of Midbrain



Identify the level and label



Cerebral cortex
Cerebellum



Thank
you